SCORE Search Results Details for Application 10516759 and Search Result 20091123 110100 us-10-516-759a-14 copy 24 81.rag.

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This page gives you Search Results detail for the Application 10516759 and Search Result 20091123 110100 us-10-516-759a-14 copy 24 81.rag.

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GenCore version 6.3

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OM protein - protein search, using sw model

Run on: November 23, 2009, 11:13:51; Search time 57 Seconds

(without alignments)

960.024 Million cell updates/sec

Title: US-10-516-759A-14 COPY 24 81

Perfect score: 350 Sequence:

Searched:

1 DIKHNRPRRDCVAEGKVCDP......RNYSRGGVCVTHCNFLNGEP 58

Scoring table: BLOSHM62

Gapop 10.0 , Gapext 0.5

5029790 segs, 943472257 residues Total number of hits satisfying chosen parameters: 5029790

Minimum DB seg length: 0

Maximum DB seg length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A Geneseg 200907:*

1: geneseqp1:*

2: geneseap2:* 3. geneseap3:*

SUMMARTES

유

Result. Query

> Score Match Length DB No. Description

1	350	100.0	82	1	ADE36725	Ade36725 Human Erb
2	350	100.0	89	1	ADE36731	Ade36731 Human Erb
3	350	100.0	531	2	AJE77228	Aje77228 Human Erb
4	350	100.0	569	2	AOJ20844	Aoj20844 Human Erb
5	350	100.0	569	3	AUP69764	Aup69764 Human Erb
6	350	100.0	570	2	AEH24404	Aeh24404 HUMEGFRBB
7	350	100.0	621	2	AOG42613	Aog42613 Human HER
8	350	100.0	621	2	AOG42228	Aog42228 Human HER
9	350	100.0	624	2	AEH24397	Aeh24397 HUMEGFRBB
10	350	100.0	624	2	AEH24406	Aeh24406 HUMEGFRBB
11	350	100.0	625	2	ATT39332	Att39332 Human ERB
12	350	100.0	626	2	ATT39333	Att39333 Human ERB
13	350	100.0	640	1	ADE36713	Ade36713 Human Erb
14	350	100.0	640	1	ADW39268	Adw39268 Human Erb
15	350	100.0	699	2	AEH24399	Aeh24399 HUMEGFRBB
16	350	100.0	824	2	ATT39331	Att39331 Human ERB
17	350	100.0	843	2	ATT39330	Att39330 Human ERB
18	350	100.0	857	2	AOG42248	Aog42248 Human HER
19	350	100.0	866	2	AOG42602	Aog42602 Human HER
20	350	100.0	1298	2	AEK41239	Aek41239 Human tyr
21	350	100.0	1300	2	AOJ20843	Aoj20843 Human Erb
22	350	100.0	1302	2	AOJ20845	Aoj20845 Human Erb
23	350	100.0	1342	1	AAR13833	Aar13833 HER-3 epi
24	350	100.0	1342	1	AAR88453	Aar88453 erbB-3 po
25	350	100.0	1342	1	AAW69406	Aaw69406 ErbB-3 gl
26	350	100.0	1342	1	AAY16594	Aay16594 erbB-3 pr
27	350	100.0	1342	1	AAG65359	Aag65359 Human Her
28	350	100.0	1342	1	ADE62708	Ade62708 Human Pro
29	350	100.0	1342	1	ADB67646	Adb67646 Human epi
30	350	100.0	1342	1	ADB67617	Adb67617 Human epi
31	350	100.0	1342	1	ADB67645	Adb67645 Human epi
32	350	100.0	1342	1	ADB67647	Adb67647 Human epi
33	350	100.0	1342	1	ADB67642	Adb67642 Human epi
34	350	100.0	1342	1	ADB67644	Adb67644 Human epi
35	350	100.0	1342	1	ADB67643	Adb67643 Human epi
36	350	100.0	1342	1	ADN39920	Adn39920 Cancer/an
37	350	100.0	1342	1	ADA37256	Ada37256 Human Erb
38	350	100.0	1342	1	ADM10301	Adm10301 Human epi
39	350	100.0	1342	1	ADD52685	Add52685 Human erb
40	350	100.0	1342	1	ADE36712	Ade36712 Human Erb
41	350	100.0	1342	1	ADW39267	Adw39267 Human Erb
42	350	100.0	1342	1	ADJ66656	Adj66656 Her3 prot
43	350	100.0	1342	1	ADO56208	Ado56208 Human Erb
44	350	100.0	1342	1	ADP54346	Adp54346 Human PRO
45	350	100.0	1342	1	ADQ19366	Adq19366 Human sof

```
RESULT 1
ADE36725
     ADE36725 standard; protein; 82 AA.
XX
AC
     ADE36725:
XX
DT
     29-JAN-2004 (first entry)
XX
DE
     Human ErbB-3-f12 amino acid sequence SEQ ID NO:14.
XX
     neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
KW
     human.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2003080835-A1.
XX
     02-OCT-2003.
PD
XX
PF
     26-MAR-2003; 2003WO-CN000217.
XX
PR
     26-MAR-2002; 2002CN-00116259.
XX
PA
     (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
XX
PΙ
     Zhou M:
XX
DR
     WPI; 2003-876924/81.
XX
PΤ
     Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
PΤ
     their fragments, for treating, preventing or delaying neoplasms (e.g.
PΤ
     urethra, uterus, vaqina or vulva neoplasm) or cancers (e.g. breast, ovary
PT
     or colon cancer).
XX
PS
     Claim 22; SEO ID NO 14; 68pp; English.
XX
CC
     The present invention describes a method for treating, preventing or
     delaying neoplasm in a mammal. The method comprises administering an ErbB
CC
CC
     -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
CC
     functional fragments, where an immune response is generated against the
CC
     neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
CC
     therapy. The method is useful for treating, preventing or delaying
CC
     neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
CC
     bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
CC
     endometrium, oesophagus, eve, evelids, fallopian tube, gastrointestinal
     tract, head and neck, heart, kidney, larvnx, liver, lung, mandible,
CC
     mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,
```

```
ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
    rectum, retina, salivary glands, skin, small intestine, spinal cord,
CC
CC
    stomach, testes, thyroid, tonsil, urethra, uterus, vagina,
CC
    vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
CC
    stomach, prostate, colon and lung cancer). The present sequence
    represents a human ErbB-3 amino acid sequence, which is used in the
CC
CC
    exemplification of the present invention. N.B. The present sequence is
    designated as SEO ID NO:14 in the Sequence Listing but does not
CC
CC
    correspond with the SEO ID NO:14 given in figure 23.
XX
SQ.
    Sequence 82 AA;
 Ouerv Match
                        100.0%; Score 350; DB 1; Length 82;
 Best Local Similarity 100.0%;
 Matches 58; Conservative 0; Mismatches
                                               0; Indels
                                                              0; Gaps
                                                                          0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qv
             Db
          24 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 81
RESULT 2
ADE36731
ID
    ADE36731 standard; protein; 89 AA.
XX
AC
    ADE36731;
XX
DT
    29-JAN-2004 (first entry)
XX
    Human ErbB-3-f12 amino acid sequence SEO ID NO:14.
DE.
XX
KW
    neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
KW
    human.
XX
OS
    Homo sapiens.
XX
PN
    W02003080835-A1.
XX
PD
    02-OCT-2003.
XX
PF
    26-MAR-2003; 2003WO-CN000217.
XX
PR
    26-MAR-2002; 2002CN-00116259.
XX
PA
    (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
XX
PΙ
    Zhou M:
XX
DR
    WPI; 2003-876924/81.
```

DR

XX

N-PSDB; ADE36730.

```
Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
PT
     their fragments, for treating, preventing or delaying neoplasms (e.g.
PT
PТ
     urethra, uterus, vaqina or vulva neoplasm) or cancers (e.g. breast, ovary
PT
     or colon cancer).
XX
PS
     Claim 22; Fig 23; 68pp; English.
XX
CC
     The present invention describes a method for treating, preventing or
CC
     delaying neoplasm in a mammal. The method comprises administering an ErbB
CC
     -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
     functional fragments, where an immune response is generated against the
CC
CC
     neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
CC
     therapy. The method is useful for treating, preventing or delaying
     neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
CC
CC
     bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
CC
     endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal
CC
     tract, head and neck, heart, kidney, larvnx, liver, lung, mandible,
CC
     mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,
CC
     ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
CC
     rectum, retina, salivary glands, skin, small intestine, spinal cord,
CC
     stomach, testes, thyroid, tonsil, urethra, uterus, vagina,
CC
     vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
CC
     stomach, prostate, colon and lung cancer). The present sequence
CC
     represents a human ErbB-3 amino acid sequence, which is used in the
CC
     exemplification of the present invention. N.B. The present sequence is
CC
     designated as SEQ ID NO:14 in figure 23 but does not correspond with the
CC
     SEQ ID NO:14 given in the Sequence Listing.
XX
SO
     Sequence 89 AA;
```

```
Query Match
                      100.0%; Score 350; DB 1; Length 89;
Best Local Similarity
                      100.0%:
Matches 58: Conservative
                            0: Mismatches
                                              0;
                                                  Indels
                                                           0: Gaps
                                                                       0;
```

```
1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Οv
       Db
```

24 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 81

```
RESULT 3
AJE77228
ID
     AJE77228 standard; protein; 531 AA.
```

```
XX
AC
    AJE77228:
XX
```

DT 18-OCT-2007 (first entry) XX

```
SCORE Search Results Details for Application 10516759 and Search Result 20091123 110100 us-10-516-759a-14 copy 24 81.rag.
DE
     Human ErbB3 tyrosine kinase receptor ectodomain protein (aa: 1-531).
XX
     Diagnosis; prognosis; therapeutic; cancer;
KW
     Erbb3 tyrosine kinase receptor.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2007092932-A2.
XX
PD
     16-AUG-2007.
XX
PF
     08-FEB-2007: 2007WO-US061863.
XX
PR
     08-FEB-2006; 2006US-0771237P.
PR
     05-OCT-2006; 2006US-0828343P.
XX
PΑ
     (TARG-) TARGETED MOLECULAR DIAGNOSTICS LLC.
PA
     (YEDA ) YEDA RES & DEV CO LTD.
XX
PΙ
     Bacus SS, Hill JE, Yarden Y, Kochupurakkal BS;
XX
DR
     WPI; 2007-690352/64.
DR
     N-PSDB; AJE77227.
DR
     REFSEO; NP 001973.
XX
PT
PΤ
```

New bivalent binding molecule having binding affinity for ErbB ligand at separate binding sites in a single covalently joined protein molecule, useful for treating a disease or condition by removal or inhibition of an ErbB ligand.

Claim 10; SEO ID NO 6; 37pp; English.

The present invention relates to new bivalent ErbB-based ligand binding molecules along with their method of preparation and use. The binding molecule can be a protein expressed from a recombinant DNA molecule and contain two extracellular domains of an ErbB receptor wherein both the domains bind to ErbB receptor ligands. These binding molecules act as traps to bind and sequester ligands, thus making them unavailable for binding to cellular ErbB receptors. The bivalent binding molecules and methods of the invention are useful for diagnosing and prognosing cancer and treating a disease or condition that is improved, ameliorated or inhibited by removal or inhibition of an ErbB ligand. The present sequence is human erythroblastic leukemia viral oncogene homolog 3 tyrosine kinase receptor (ErbB3 tyrosine kinase receptor; HER3) receptor ectodomain protein. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.

Sequence 531 AA;

PT PT

XX PS

CC

CC CC

XX SQ

```
Ouerv Match
                        100.0%; Score 350; DB 2; Length 531;
 Best Local Similarity 100.0%;
 Matches 58; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                       0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Qv
             Dh
         464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 521
RESULT 4
AOJ20844
ID
    AOJ20844 standard; protein; 569 AA.
XX
A.C.
    AOJ20844;
XX
DT
    06-MAR-2008 (first entry)
XX
    Human ErbB3 receptor tyrosine kinase protein SEO:97.
DE
XX
KW
    splicing; gene identification signature analysis; therapeutic; diagnosis;
KW
    cancer; cytostatic; inflammation; antiinflammatory; autoimmune disease;
KW
     immunosuppresive; graft rejection.
XX
OS
    Homo sapiens.
XX
PN
    W02005071059-A2.
XX
PD
    04-AUG-2005.
XX
PF
    27-JAN-2005; 2005WO-IL000107.
XX
PR
    27-JAN-2004; 2004US-0539128P.
PR
    15-JUN-2004; 2004US-0579202P.
XX
PA
    (COMP-) COMPUGEN LTD.
XX
PΙ
    Sorek R, Pollock S, Diber A, Levine Z, Nemzer S, Kol G, Wool A;
PΙ
    Haviv A, Cohen Y, Cohen Y, Shemesh R, Savitsky K;
XX
    WPI: 2005-555488/56.
DR
XX
PT
    Identifying alternatively spliced exons, involves scoring each of several
    exon sequences derived from genes of species according to one or more
PT
PT
    sequence parameters.
XX
PS
    Example 3: SEO ID NO 97: 991pp; English.
XX
```

The present invention relates to a novel method of identifying (M1)

CC

```
SCORE Search Results Details for Application 10516759 and Search Result 20091123_110100_us-10-516-759a-14_copy_24_81.rag.
```

alternatively spliced exons. The method comprises scoring each of several exon sequences derived from genes of a species according to at least one CC sequence parameter, where the exon sequences of the several exon CC sequences scoring above a predetermined threshold represent alternatively CC spliced exons, thus identifying the alternatively spliced exons. Also claimed are: a system (S1) for generating a database of alternatively CC CC spliced exons; predicting (M2) expression products of a gene of interest and analyzing chromosomal location of each of the alternatively spliced CC CC exons with respect to coding sequence of the gene of interest to thus CC predict expression products of the gene of interest. (M1) is useful for CC identifying alternatively spliced exons. (S1) is useful for generating a database of alternatively spliced exons. The DNA and the protein CC sequences of the invention are useful for the diagnosis and/or treatment CC CC of the diseases like cancer, inflammatory disease, autoimmune disease, CC allergy and graft rejection. The present seguence represents a human CC ErbB3 receptor tyrosine kinase protein. XX

SQ Sequence 569 AA;

```
Query Match 100.0%; Score 350; DB 2; Length 569; Best Local Similarity 100.0%; Matches 58; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 5
AUP69764
ID AUP69764 standard; protein; 569 AA.
XX
AC AUP69764;
XX
DT 19-FEB-2009 (first entry)
```

Human Erbb3 tyrosine kinase receptor (delta15HER3) protein SEQ ID NO: 12.

tumor marker; protein therapy; therapeutic; ovary tumor; cytostatic; endocrine-gen.; gynecological; uropathic; breast tumor; hyperproliferation; cancer; lung tumor; respiratory-gen.; stomach tumor; gastrointestinal-gen.; colon tumor; pulmonary fibrosis; antiinflammatory.

KW gastrointestinal-gen.; colon tumor; pulmonary fibrosis; antiinflammatory;
KW Erbb3 tyrosine kinase receptor; HER3;

 $\ensuremath{\mathsf{KW}}$ human epidermal growth factor receptor 3. XX

OS Homo sapiens.

XX DE

XX

KW

KW

PN W02008153933-A2.

PD

XX

18-DEC-2008.

Query Match

Οv

Best Local Similarity

```
PF
     06-JUN-2008; 2008WO-US007111.
XX
PR
     06-JUN-2007; 2007US-0942319P.
     20-AUG-2007: 2007US-0956887P.
PR
XX
PΑ
     (AVIB-) AVI BIOPHARMA INC.
XX
PΙ
     Kole R, Sazani P, Wan J;
XX
DR
     WPI: 2009-A43572/02.
     N-PSDB: AUP69763.
DR
XX
     New soluble, human epidermal growth factor receptor-2 (HER2) splice
PT
PΤ
     variant protein is HER2 antagonist, useful for the treatment of
PΤ
     proliferative diseases e.g. ovarian or breast cancer and pulmonary
PΤ
     fibrosis.
XX
PS
     Disclosure; SEQ ID NO 12; 86pp; English.
XX
CC
     The present invention relates to novel isolated soluble human epidermal
CC
     growth factor receptor 2 and 3 (HER2 and HER3) proteins with HER2 and
CC
     HER3 antagonist activity and anti-proliferative properties. The invention
CC
     further discloses (i) an isolated nucleic acid encoding HER2 but lacking
CC
     exon 15 of the normal HER2 transcript, with exon 14 joined directly to
CC
     exon 16, and containing a stop codon within exon 16, (ii) a splice-
     switching compound comprising an oligonucleotide between 12-30 bases and
CC
CC
     at least 12 contiquous bases complementary to an exon-15 or 14 acceptor
CC
     or donor splice site region contained within SEO ID NO: 15 and (iii) a
CC
     method of treating a subject having ovarian or breast cancer
CC
     characterized by over expression of human epidermal growth factor
CC
     receptor-2 (HER2), which involves administering HER2 or the compound
     comprising an oligonucleotide to the subject. The isolated soluble human
CC
     epidermal growth factor receptor-2 (HER2) protein of the invention is
CC
CC
     useful treating a subject having ovarian or breast cancer characterized
CC
     by over expression of human epidermal growth factor receptor-2 (HER2),
     and proliferative diseases such as cancer (lung, gastric and colon
CC
     cancer) and pulmonary fibrosis. The present sequence represents a human
CC
     Erbb3 tyrosine kinase receptor (delta15HER3) protein.
CC
XX
SO
     Sequence 569 AA:
```

1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58

100.0%; Score 350; DB 3; Length 569;

0: Indels

0: Gaps

0:

100.0%: Matches 58: Conservative 0: Mismatches AEH24404 standard; protein; 570 AA.

RESULT 6 AEH24404 ID AEH

```
Db 483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 540
```

```
XX
AC
    AEH24404;
XX
DT
     29-JUN-2006 (first entry)
XX
DE
     HUMEGFRBB3_PEA_1_P53 polypeptide.
XX
KW
     diagnostic; prognosis; genetic marker; screening; cancer; cytostatic;
     neoplasm; HUMEGFRBB3 PEA 1 P53; protein-tyrosine kinase erbB-3 precursor;
KW
KW
     ERBB3.
XX
OS
     Homo sapiens.
XX
PN
     W02006043271-A1.
XX
PD
     27-APR-2006.
XX
PF
     16-OCT-2005; 2005WO-IL001096.
XX
PR
     22-OCT-2004; 2004US-0621004P.
PR
     18-NOV-2004; 2004US-0628529P.
XX
PA
    (COMP-) COMPUGEN LTD.
XX
PΙ
     Novik A, Pollock S, Levine Z, Daharv D, Sorek R, Sella-Tavor O;
PΙ
     Cohen-Dayag A, Sameach-Greenwald S, Walach S;
XX
DR
     WPI: 2006-331789/34.
DR
     N-PSDB; AEH24321.
XX
     New isolated polynucleotide and polypeptide markers, useful as diagnostic
PT
PΤ
     markers for diagnosing diseases, predicting response to treatment,
PΤ
     monitoring treatment, or determining prognosis of a marker-detectable
PT
     disease.
XX
PS
     Example 5; SEO ID NO 144; 421pp; English.
XX
CC
     The invention describes an isolated polynucleotide comprising
CC
     HUMA1ACM_PEA 2 _T21, HUMA1ACM_PEA 2 _T27, or HUMA1ACM_PEA 2 _T7
     comprising 1320, 1239, or 2713 bp (SEQ ID NO. 1, 2, or 3). Also described
CC
     are: an isolated polypeptide selected from HUMA1ACM PEA 2 P36 (SEO ID
CC
     NO. 51), HUMAIACM PEA 2 P49 (SEO ID NO. 52), or HUMAIACM PEA 2 P59 (SEO
CC
CC
     ID NO. 53); an isolated polypeptide encoding for a head of: (a)
```

```
HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous to SEQ ID NO.
     180 or 182 of HUMAlACM_PEA 2 _P36; (b) HUMAlACM_PEA 2 _P49 comprising a
    polypeptide 70% homologous to SEO ID NO. 182 of HUMA1ACM PEA 2 P49; or
CC
     (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70% homologous to SEQ ID
    NO. 182 of HUMAIACM PEA 2 P59; an isolated polypeptide encoding for a
    tail of: (a) HUMAlACM_PEA 2 _P36 comprising a polypeptide 70% homologous
    to SEQ ID NO. 181 in HUMA1ACM_PEA 2 _P36; (b) HUMA1ACM_PEA 2 _P49
    comprising a polypeptide 70% homologous to SEQ ID NO. 183 in HUMALACM_PEA
    2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70%
CC
    homologous to SEQ ID NO. 185 or 208 in HUMA1ACM PEA 2 P59; a primer pair
CC
     comprising a pair of isolated oligonucleotides capable of amplifying the
     amplicon; an antibody capable of specifically binding to an epitope of
     the amino acid sequence; a kit for detecting a marker-detectable disease
CC
CC
     comprising a kit detecting specific expression of a splice variant; a
    biomarker capable of detecting marker-detectable disease comprising the
CC
     nucleic acid sequences or amino acid sequence, or its fragments. The
CC
    polynucleotides and polypeptides are useful as diagnostic markers for
CC
    diagnosing and screening for diseases diseases e.g., cancer, selecting a
CC
     therapy for a marker-detectable disease and determining prognosis of a
    marker-detectable disease, as well as for predicting response to
CC
CC
     treatment and monitoring treatment. This sequence represents a
CC
    HUMEGFRBB3_PEA_1_P53 polypeptide, a transcript from the HUMEGFRBB3
CC
    cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as
CC
     a diagnostic marker.
```

Sequence 570 AA;

Query Match

CC

CC CC

CC

CC

CC

CC

XX SO

```
Best Local Similarity
                     100.0%;
Matches 58; Conservative 0; Mismatches
                                             0; Indels
                                                           0; Gaps
                                                                      0;
         1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
```

100.0%; Score 350; DB 2; Length 570;

Qу Db 483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540

AOG42613 ID AOG42613 standard; protein; 621 AA.

```
XX
```

AOG42613; AC XX

RESULT 7

DE

DT 06-MAR-2008 (first entry) XX

Human HER3 receptor extracellular domain (HF310) mutant protein.

XX KW Therapeutic; cancer; cytostatic; pancreas tumor; stomach tumor;

head & neck tumor; uterine cervix tumor; lung tumor; colorectal tumor; KW endometroid carcinoma; prostate tumor; esophagus tumor; ovary tumor; KW

```
SCORE Search Results Details for Application 10516759 and Search Result 20091123_110100_us-10-516-759a-14_copy_24_81.rag.
```

```
KW
     uterus tumor; glioma; bladder tumor; renal tumor; breast tumor;
     hyperproliferation; ocular disease; ophthalmological;
KW
     diabetic retinopathy; antidiabetic; psoriasis; antipsoriatic; restenosis;
KW
     vasotropic; stenosis; atherosclerosis; antiarteriosclerotic;
KW
     chronic obstructive airway disease; respiratory-gen.; inflammation;
KW
     antiinflammatory; angiogenesis disorder; antiangiogenic; gene therapy;
KW
KW
     HER3; receptor; ErbB3; mutein.
XX
     Homo sapiens.
OS
OS
     Synthetic.
XX
FΗ
     Kev
                     Location/Qualifiers
FT
     Misc-difference 541
FT
                     /note= "Wild type Glv replaced with Glu"
XX
PN
     WO2007146959-A2.
XX
PD
     21-DEC-2007.
XX
PF
     12-JUN-2007; 2007WO-US071041.
XX
PR
     12-JUN-2006; 2006US-0813260P.
PR
     29-SEP-2006; 2006US-0848542P.
PR
     05-JAN-2007; 2007US-0878941P.
XX
PA
     (RECE-) RECEPTOR BIOLOGIX INC.
XX
PΙ
     Shepard HM, Jin P, Burton LE, Beryt M;
XX
     WPI: 2008-B51284/10.
DR
XX
PΤ
     New multimer comprising extracellular domain ECD from HER1 receptor,
     useful for treating cancer, inflammatory disease, angiogenic disease or
PΤ
PΤ
     hyperproliferative disease.
XX
     Disclosure; Page; 320pp; English.
PS
XX
CC
     The present invention provides pan-cell surface receptor specific
CC
     therapeutics including and pan-HER (also referred to as ErbB or EGFR)
     specific therapeutics that interact with at least two different HER
CC
CC
     receptor ligands and/or dimerize with or interact with two or more HER
CC
     cell surface receptors. The invention is useful for treating cancer such
CC
     as pancreatic, gastric, head and neck, cervical, lung, colorectal,
CC
     endometrial, prostate, esophageal, ovarian, uterine, glioma, bladder,
     renal and breast cancer, proliferative diseases such as proliferation
     and/or migration of smooth muscle cells, disease of the anterior eye,
CC
CC
     diabetic retinopathy, psoriasis, restenosis, ophthalmic disorders,
     stenosis, atherosclerosis, hypertension from thickening of blood vessels,
CC
     bladder diseases and obstructive airway diseases, inflammatory disease
```

```
SCORE\ Search\ Results\ Details\ for\ Application\ 10516759\ and\ Search\ Result\ 20091123\_110100\_us-10-516-759a-14\_copy\_24\_81.rag.
```

```
and angiogenic disease. The invention is also useful in gene therapy. The
    present sequence is human HER3 receptor (ErbB3) extracellular domain
CC
    mutant protein. Note: This sequence is not shown in the specification,
CC
CC
    but is derived from human HER3 receptor ECD protein shown as SEO ID NO:
CC
    26 in sequence listing of the specification.
XX
SO
    Sequence 621 AA;
 Ouerv Match
                         100.0%; Score 350; DB 2; Length 621;
 Best Local Similarity 100.0%;
 Matches 58; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                          0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Qy
             464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 521
Db
RESULT 8
AOG42228
ID
    AOG42228 standard; protein; 621 AA.
XX
AC
    AOG42228;
XX
DT
    06-MAR-2008 (first entry)
XX
DE
    Human HER3 receptor extracellular domain protein, HF310.
XX
KW
    Therapeutic; cancer; cytostatic; pancreas tumor; stomach tumor;
KW
    head & neck tumor; uterine cervix tumor; lung tumor; colorectal tumor;
     endometroid carcinoma; prostate tumor; esophagus tumor; ovary tumor;
KW
    uterus tumor; glioma; bladder tumor; renal tumor; breast tumor;
KW
KW
    hyperproliferation; ocular disease; ophthalmological;
    diabetic retinopathy; antidiabetic; psoriasis; antipsoriatic; restenosis;
KW
KW
    vasotropic: stenosis: atherosclerosis: antiarteriosclerotic:
     chronic obstructive airway disease; respiratory-gen.; inflammation;
KW
     antiinflammatory; angiogenesis disorder; antiangiogenic; gene therapy;
KW
    HER3; receptor; ErbB3.
KW
XX
OS
    Homo sapiens.
XX
                   Location/Oualifiers
FH
    Kev
    Misc-difference 541
FT
FT
                    /note= "Encoded by GAG"
XX
PN
    W02007146959-A2.
XX
PD
    21-DEC-2007.
XX
PF
    12-JUN-2007; 2007WO-US071041.
```

12-JUN-2006; 2006US-0813260P.

XX

PR

Db

```
29-SEP-2006; 2006US-0848542P.
PR
PR
     05-JAN-2007; 2007US-0878941P.
XX
PA
     (RECE-) RECEPTOR BIOLOGIX INC.
XX
PΙ
     Shepard HM, Jin P, Burton LE, Beryt M;
XX
DR
     WPI; 2008-B51284/10.
DR
     N-PSDB; AOG42227.
XX
     New multimer comprising extracellular domain ECD from HER1 receptor,
PT
     useful for treating cancer, inflammatory disease, angiogenic disease or
PT
     hyperproliferative disease.
PT
XX
PS
     Claim 95; SEQ ID NO 26; 320pp; English.
XX
CC
     The present invention provides pan-cell surface receptor specific
     therapeutics including and pan-HER (also referred to as ErbB or EGFR)
CC
CC
     specific therapeutics that interact with at least two different HER
CC
     receptor ligands and/or dimerize with or interact with two or more HER
CC
     cell surface receptors. The invention is useful for treating cancer such
CC
     as pancreatic, gastric, head and neck, cervical, lung, colorectal,
CC
     endometrial, prostate, esophageal, ovarian, uterine, glioma, bladder,
CC
     renal and breast cancer, proliferative diseases such as proliferation
CC
     and/or migration of smooth muscle cells, disease of the anterior eye,
     diabetic retinopathy, psoriasis, restenosis, ophthalmic disorders,
CC
CC
     stenosis, atherosclerosis, hypertension from thickening of blood vessels,
     bladder diseases and obstructive airway diseases, inflammatory disease
CC
CC
     and angiogenic disease. The invention is also useful in gene therapy. The
CC
     present sequence is human HER3 receptor (ErbB3) extracellular domain
CC
    protein.
XX
SO
     Sequence 621 AA;
  Ouerv Match
                          100.0%; Score 350; DB 2; Length 621;
  Best Local Similarity
                         100.0%;
  Matches 58; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                             0;
            1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
```

```
RESULT 9
AEH24397
ID AEH24397 standard; protein; 624 AA.
xx
```

464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 521

```
AC
     AEH24397;
XX
     29-JUN-2006 (first entry)
DT
XX
DE
     HUMEGFRBB3 PEA 1 P15 polypeptide.
XX
     diagnostic; prognosis; genetic marker; screening; cancer; cytostatic;
KW
     neoplasm; HUMEGFRBB3 PEA 1 P15; protein-tyrosine kinase erbB-3 precursor;
KW
     ERBB3.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2006043271-A1.
XX
     27-APR-2006.
PD
XX
PF
     16-OCT-2005; 2005WO-IL001096.
XX
PR
     22-OCT-2004; 2004US-0621004P.
     18-NOV-2004; 2004US-0628529P.
PR
XX
PΑ
     (COMP-) COMPUGEN LTD.
XX
PΙ
     Novik A. Pollock S. Levine Z. Daharv D. Sorek R. Sella-Tavor O;
PΙ
     Cohen-Davag A. Sameach-Greenwald S. Walach S:
XX
DR
     WPI; 2006-331789/34.
DR
     N-PSDB: AEH24320.
XX
PΤ
     New isolated polynucleotide and polypeptide markers, useful as diagnostic
PΤ
     markers for diagnosing diseases, predicting response to treatment,
PΤ
     monitoring treatment, or determining prognosis of a marker-detectable
PΤ
     disease.
XX
PS
     Example 5; SEQ ID NO 137; 421pp; English.
XX
CC
     The invention describes an isolated polynucleotide comprising
CC
     HUMA1ACM PEA 2 _T21, HUMA1ACM PEA 2 _T27, or HUMA1ACM PEA 2 _T7
CC
     comprising 1320, 1239, or 2713 bp (SEQ ID NO. 1, 2, or 3). Also described
     are: an isolated polypeptide selected from HUMA1ACM_PEA 2 _P36 (SEQ ID
CC
CC
     NO. 51), HUMALACM_PEA 2 _P49 (SEQ ID NO. 52), or HUMALACM_PEA 2 _P59 (SEQ
CC
     ID NO. 53); an isolated polypeptide encoding for a head of: (a)
CC
     HUMA1ACM PEA 2 P36 comprising a polypeptide 70% homologous to SEQ ID NO.
    180 or 182 of HUMAlACM PEA 2 P36; (b) HUMAlACM PEA 2 P49 comprising a
CC
CC
     polypeptide 70% homologous to SEQ ID NO. 182 of HUMA1ACM_PEA 2 _P49; or
    (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70% homologous to SEQ ID
CC
CC
     NO. 182 of HUMAIACM PEA 2 P59; an isolated polypeptide encoding for a
     tail of: (a) HUMA1ACM PEA 2 P36 comprising a polypeptide 70% homologous
CC
CC
     to SEQ ID NO. 181 in HUMA1ACM PEA 2 P36; (b) HUMA1ACM PEA 2 P49
```

```
comprising a polypeptide 70% homologous to SEQ ID NO. 183 in HUMALACM_PEA
     2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70%
CC
     homologous to SEO ID NO. 185 or 208 in HUMA1ACM PEA 2 P59; a primer pair
CC
     comprising a pair of isolated oligonucleotides capable of amplifying the
CC
     amplicon; an antibody capable of specifically binding to an epitope of
     the amino acid sequence; a kit for detecting a marker-detectable disease
CC
CC
     comprising a kit detecting specific expression of a splice variant; a
CC
     biomarker capable of detecting marker-detectable disease comprising the
CC
     nucleic acid sequences or amino acid sequence, or its fragments. The
CC
     polynucleotides and polypeptides are useful as diagnostic markers for
CC
     diagnosing and screening for diseases diseases e.g., cancer, selecting a
     therapy for a marker-detectable disease and determining prognosis of a
CC
CC
     marker-detectable disease, as well as for predicting response to
CC
     treatment and monitoring treatment. This sequence represents a
CC
     HUMEGFRBB3 PEA 1 P15 polypeptide, a transcript from the HUMEGFRBB3
CC
     cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as
CC
     a diagnostic marker.
XX
SO
```

Sequence 624 AA:

```
Query Match
                      100.0%; Score 350; DB 2; Length 624;
Best Local Similarity 100.0%;
Matches 58; Conservative 0; Mismatches
                                             0: Indels
                                                         0; Gaps
                                                                     0;
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1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
       Db
```

483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540

RESULT 10 AEH24406

XX

XX

TD AEH24406 standard; protein; 624 AA.

AC AEH24406:

XX

DT 29-JUN-2006 (first entry) XX

DE HUMEGFRBB3_PEA_1_P55 polypeptide.

XX

diagnostic: prognosis: genetic marker: screening: cancer: cytostatic: KW neoplasm; HUMEGFRBB3_PEA_1_P55; protein-tyrosine kinase erbB-3 precursor; KW ERBB3. KW

XX

OS Homo sapiens. XX

PN W02006043271-A1

27-APR-2006. PD XX

```
PF
     16-OCT-2005; 2005WO-IL001096.
XX
     22-OCT-2004; 2004US-0621004P.
PR
     18-NOV-2004; 2004US-0628529P.
PR
XX
PA
     (COMP-) COMPUGEN LTD.
XX
     Novik A, Pollock S, Levine Z, Dahary D, Sorek R, Sella-Tavor O;
PΙ
     Cohen-Davag A, Sameach-Greenwald S, Walach S;
PΙ
XX
     WPI; 2006-331789/34.
DR
DR
     N-PSDB: AEH24323.
XX
     New isolated polynucleotide and polypeptide markers, useful as diagnostic
PT
     markers for diagnosing diseases, predicting response to treatment,
PT
PΤ
     monitoring treatment, or determining prognosis of a marker-detectable
PΤ
     disease.
XX
PS
     Example 5; SEQ ID NO 146; 421pp; English.
XX
CC
     The invention describes an isolated polynucleotide comprising
CC
     HUMA1ACM_PEA 2 _T21, HUMA1ACM_PEA 2 _T27, or HUMA1ACM_PEA 2 _T7
CC
     comprising 1320, 1239, or 2713 bp (SEQ ID NO. 1, 2, or 3). Also described
CC
     are: an isolated polypeptide selected from HUMA1ACM_PEA 2 _P36 (SEQ ID
CC
     NO. 51), HUMAIACM PEA 2 P49 (SEO ID NO. 52), or HUMAIACM PEA 2 P59 (SEO
CC
     ID NO. 53); an isolated polypeptide encoding for a head of: (a)
CC
     HUMA1ACM PEA 2 P36 comprising a polypeptide 70% homologous to SEQ ID NO.
     180 or 182 of HUMAlaCM_PEA 2 _P36; (b) HUMAlaCM_PEA 2 _P49 comprising a
CC
CC
     polypeptide 70% homologous to SEQ ID NO. 182 of HUMA1ACM_PEA 2 _P49; or
CC
     (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70% homologous to SEQ ID
CC
     NO. 182 of HUMAIACM PEA 2 P59; an isolated polypeptide encoding for a
CC
     tail of: (a) HUMA1ACM PEA 2 P36 comprising a polypeptide 70% homologous
CC
     to SEQ ID NO. 181 in HUMA1ACM_PEA 2 _P36; (b) HUMA1ACM_PEA 2 _P49
CC
     comprising a polypeptide 70% homologous to SEQ ID NO. 183 in HUMALACM_PEA
     2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70%
CC
CC
     homologous to SEQ ID NO. 185 or 208 in HUMA1ACM_PEA 2 _P59; a primer pair
CC
     comprising a pair of isolated oligonucleotides capable of amplifying the
CC
     amplicon; an antibody capable of specifically binding to an epitope of
CC
     the amino acid sequence; a kit for detecting a marker-detectable disease
     comprising a kit detecting specific expression of a splice variant; a
CC
CC
     biomarker capable of detecting marker-detectable disease comprising the
CC
     nucleic acid sequences or amino acid sequence, or its fragments. The
CC
     polynucleotides and polypeptides are useful as diagnostic markers for
CC
     diagnosing and screening for diseases diseases e.g., cancer, selecting a
CC
     therapy for a marker-detectable disease and determining prognosis of a
CC
     marker-detectable disease, as well as for predicting response to
CC
     treatment and monitoring treatment. This sequence represents a
     HUMEGFRBB3 PEA 1 P55 polypeptide, a transcript from the HUMEGFRBB3
CC
CC
     cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as
```

```
SCORE Search Results Details for Application 10516759 and Search Result 20091123_110100_us-10-516-759a-14_copy_24_81.rag.
```

a diagnostic marker.

Sequence 624 AA;

XX SO

```
100.0%; Score 350; DB 2; Length 624;
 Query Match
 Best Local Similarity 100.0%;
 Matches 58: Conservative 0: Mismatches
                                               0: Indels
                                                            0: Gaps
                                                                         0:
Qу
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
             Db
         483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 540
RESULT 11
ATT39332
TD
    ATT39332 standard; protein; 625 AA.
XX
AC
    ATT39332:
XX
DT
    08-JAN-2009 (first entry)
XX
DE
    Human ERBB3-intein fusion protein SEQ ID 193.
XX
KW
    protein production; chimeric protein; nanotechnology;
    antibody engineering; antibody production; gene regulation;
KW
KW
    antibody therapy; therapeutic; cancer; metastasis; non-hodgkin lymphoma;
KW
    asthma; rheumatoid arthritis; psoriatic arthritis;
KW
    ankylosing spondylitis; Crohns disease; colorectal tumor;
KW
    autoimmune disease; antiallergic; antiarthritic; antiasthmatic;
    antiinflammatory; cytostatic; gastrointestinal-gen.; hematological-gen.;
KW
    immunomodulator; immunosuppressive; musculoskeletal-gen.;
KW
KW
    respiratory-gen.; Erbb3 tyrosine kinase receptor; intein; fusion protein.
XX
OS
    Homo sapiens.
OS
    Synthetic.
XX
PN
    US2008254512-A1.
XX
PD
    16-OCT-2008.
XX
PF
    31-OCT-2007; 2007US-00982085.
XX
PR
    02-NOV-2006; 2006US-0856864P.
XX
PA
    (CAPO/) CAPON D J.
XX
PΙ
    Capon DJ:
XX
DR
    WPT: 2008-015609/82.
```

XX PT New compound that comprises an independently folding protein domain fused to a second independently folding protein domain by non-peptide bond for PT treating e.g. cancer, metastatic disease, asthma, rheumatoid arthritis PT PТ and autoimmune disease. XX

Example 9; SEQ ID NO 193; 363pp; English.

The present invention relates to a novel compound comprising an independently folding protein domain fused to a second independently folding protein domain by a non-peptide bond around which dihedral rotation may occur. The invention, in particular, relates to hybrid immunoglobulins containing moving parts, related compositions, methods of use, methods of production of such hybrid immunoglobulins; and to analogous genetic devices, preferably nanodevices. The protein-like compounds (preferably immunoglobulins) and their dimers and multimers are useful for affecting the activity of a target, e.g. epidermal growth factor (EGF) receptor, human epidermal growth factor receptor 2 (HER2), vascular endothelial growth factor (VEGF) receptor (e.g. VEGFR1, VEGFR6, and VEGFR3), CD20 antigen, CD11a leukocyte receptor, IgE immunoglobulin, glycoprotein IIa receptor, glycoprotein IIIa receptor, tumor necrosis factor (TNF) alpha (e.g. TNFRSF1a, and TNFRSF1b), or TNF receptor, gap protein 120 (gp120), human Erb1 (proto-oncogene), Erb2, Erb6, Erb3 and Erb4; useful for treating e.g. cancer, metastatic disease, B-cell non-Hodgkin's lymphoma, asthma, a subject having a skin test positive for perennial aerocollagen, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, fustulizing disease, metastatic colorectal carcinoma, as an adjunct to percutaneous coronary intervention, and autoimmune diseases. The present sequence represents a fusion protein comprising the human Erbb3 tyrosine kinase receptor fused with the human intein polypeptide which was useful during the method of the invention for the production of hybrid immunoglobulins.

```
Sequence 625 AA;
```

PS

XX CC

CC

CC

CC

CC CC

CC

CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC CC

CC

XX SO

```
Ouerv Match
                      100.0%; Score 350; DB 2; Length 625;
Best Local Similarity 100.0%;
Matches 58; Conservative
                           0; Mismatches
                                              0; Indels
                                                           0;
                                                                      0;
                                                              Gaps
```

```
1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Qv
         Db
       464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 521
```

```
RESULT 12
ATT39333
    ATT39333 standard; protein; 626 AA.
ID
XX
AC
    ATT39333;
```

protein production; chimeric protein; nanotechnology; antibody engineering; antibody production; gene regulation;

ankylosing spondylitis; Crohns disease; colorectal tumor; autoimmune disease; antiallergic; antiarthritic; antiasthmatic;

asthma; rheumatoid arthritis; psoriatic arthritis;

antibody therapy; therapeutic; cancer; metastasis; non-hodgkin lymphoma;

antiinflammatory; cytostatic; qastrointestinal-qen.; hematological-qen.;

Human ERBB3-intein fusion protein SEO ID 194.

08-JAN-2009 (first entry)

XX DT

XX DE.

XX KW

KW

KW

KW KW

KW KW

```
immunomodulator; immunosuppressive; musculoskeletal-gen.;
KW
     respiratory-gen.; Erbb3 tyrosine kinase receptor; intein; fusion protein.
KW
XX
OS
     Homo sapiens.
OS
     Synthetic.
XX
PN
     US2008254512-A1.
XX
PD
     16-OCT-2008.
XX
PF
     31-OCT-2007; 2007US-00982085.
XX
PR
     02-NOV-2006; 2006US-0856864P.
XX
PA
     (CAPO/) CAPON D J.
XX
PΙ
     Capon DJ;
XX
DR
     WPI: 2008-015609/82.
XX
PΤ
     New compound that comprises an independently folding protein domain fused
PΤ
     to a second independently folding protein domain by non-peptide bond for
     treating e.g. cancer, metastatic disease, asthma, rheumatoid arthritis
PT
     and autoimmune disease.
PT
XX
PS
     Example 9; SEQ ID NO 194; 363pp; English.
XX
     The present invention relates to a novel compound comprising an
CC
CC
     independently folding protein domain fused to a second independently
     folding protein domain by a non-peptide bond around which dihedral
CC
CC
     rotation may occur. The invention, in particular, relates to hybrid
CC
     immunoglobulins containing moving parts, related compositions, methods of
CC
     use, methods of production of such hybrid immunoglobulins; and to
     analogous genetic devices, preferably nanodevices. The protein-like
CC
CC
     compounds (preferably immunoglobulins) and their dimers and multimers are
     useful for affecting the activity of a target, e.g. epidermal growth
CC
     factor (EGF) receptor, human epidermal growth factor receptor 2 (HER2),
http://es/ScoreAccessWeb/GetItem.action?AppId=10516...0-516-759a-14_copy_24_81.rag&ItemType=4&startByte=0 (20 of 25)11/30/2009 3:01:17 PM
```

```
vascular endothelial growth factor (VEGF) receptor (e.g. VEGFR1, VEGFR6,
     and VEGFR3), CD20 antigen, CD11a leukocyte receptor, IgE immunoglobulin,
CC
     glycoprotein IIa receptor, glycoprotein IIIa receptor, tumor necrosis
CC
    factor (TNF) alpha (e.g. TNFRSF1a, and TNFRSF1b), or TNF receptor, gap
CC
    protein 120 (gp120), human Erbl (proto-oncogene), Erb2, Erb6, Erb3 and
    Erb4; useful for treating e.g. cancer, metastatic disease, B-cell non-
CC
CC
    Hodgkin's lymphoma, asthma, a subject having a skin test positive for
    perennial aerocollagen, rheumatoid arthritis, psoriatic arthritis,
CC
CC
     ankylosing spondylitis, Crohn's disease, fustulizing disease, metastatic
CC
     colorectal carcinoma, as an adjunct to percutaneous coronary
CC
     intervention, and autoimmune diseases. The present sequence represents a
CC
     fusion protein comprising the human Erbb3 tyrosine kinase receptor fused
    with the human intein polypeptide which was useful during the method of
CC
CC
     the invention for the production of hybrid immunoglobulins.
XX
SQ.
    Sequence 626 AA;
 Query Match
                        100.0%; Score 350; DB 2; Length 626;
 Best Local Similarity 100.0%;
 Matches 58; Conservative 0; Mismatches
                                                0; Indels
                                                              0; Gaps
                                                                          0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qv
             Db
         464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 521
RESULT 13
ADE36713
ID
    ADE36713 standard; protein; 640 AA.
XX
AC
    ADE36713;
XX
DT
    29-JAN-2004 (first entry)
XX
DE
    Human ErbB-3 partial amino acid sequence SEO ID NO:2.
XX
    neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
KW
KW
    human.
XX
OS
    Homo sapiens.
XX
PN
    WO2003080835-A1.
XX
PD
    02-OCT-2003.
XX
PF
    26-MAR-2003: 2003WO-CN000217.
XX
    26-MAR-2002; 2002CN-00116259.
PR
```

XX

```
PA
     (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
XX
PΙ
     Zhou M:
XX
DR
     WPI; 2003-876924/81.
XX
PT
     Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
     their fragments, for treating, preventing or delaying neoplasms (e.g.
PT
PТ
     urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovarv
PΤ
     or colon cancer).
XX
PS
     Claim 22; SEQ ID NO 2; 68pp; English.
XX
CC
     The present invention describes a method for treating, preventing or
CC
     delaying neoplasm in a mammal. The method comprises administering an ErbB
CC
     -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
CC
     functional fragments, where an immune response is generated against the
     neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
CC
CC
     therapy. The method is useful for treating, preventing or delaying
CC
     neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
CC
     bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
CC
     endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal
CC
     tract, head and neck, heart, kidney, larynx, liver, lung, mandible,
CC
     mandibular condule, maxilla, mouth, nasopharvnx, nose, oral cavity,
     ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
CC
CC
     rectum, retina, salivary glands, skin, small intestine, spinal cord,
CC
     stomach, testes, thyroid, tonsil, urethra, uterus, vagina,
     vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
CC
CC
     stomach, prostate, colon and lung cancer). The present sequence
CC
     represents a human ErbB-3 amino acid sequence, which is used in the
CC
     exemplification of the present invention.
XX
SO
     Sequence 640 AA;
  Query Match
                          100.0%; Score 350; DB 1; Length 640;
  Best Local Similarity 100.0%;
```

```
Matches 58; Conservative
                        0; Mismatches 0; Indels
                                                  0; Gaps
                                                             0;
```

```
1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qv
          Dh
      483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 540
```

```
RESULT 14
ADW39268
```

```
ID
    ADW39268 standard; protein; 640 AA.
XX
```

```
ADW39268;
AC
XX
```

```
DT
    24-MAR-2005 (first entry)
XX
    Human Erb-3 polypeptide SEO ID NO 2.
DE
XX
KW
    therapy; tumor; cytostatic; neoplasm; ErbB-3.
XX
OS
    Homo sapiens.
XX
PN
    CN1444992-A.
XX
PD
    01-OCT-2003.
XX
PF
    26-MAR-2002; 2002CN-00116259.
XX
    18-MAR-2002; 2002CN-00107357.
PR
XX
PA
     (ZESH-) ZESHENG SCI & TECHNOLOGY DEV CO LTD SHAN.
XX
PΙ
    Zhou M:
XX
DR
    WPT: 2004-091783/10.
XX
PT
    Method and combination for treating tumors based on ERBB-3.
XX
PS
    Claim 5; SEO ID NO 2; 45pp; Chinese.
XX
CC
    The invention describes a composition and method for preventing and
CC
    treating a tumor of the mammalian or human body. The method involves
CC
    using the ErbB-3 protein, nucleic acid for encoding the protein, or their
CC
    functional fragment e.g. the extracellular domain. This is the amino acid
CC
    sequence of a human Erb-3 polypeptide.
XX
SO
    Sequence 640 AA;
 Query Match
                        100.0%; Score 350; DB 1; Length 640;
 Best Local Similarity 100.0%;
 Matches 58; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                         0:
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qv
             Db
         483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 540
```

AEH24399 standard; protein; 699 AA.

RESULT 15 AEH24399

AC AEH24399;

XX

XX

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SCORE\ Search\ Results\ Details\ for\ Application\ 10516759\ and\ Search\ Result\ 20091123\_110100\_us-10-516-759a-14\_copy\_24\_81.rag.
```

```
DT
     29-JUN-2006 (first entry)
XX
     HUMEGFRBB3 PEA 1 P31 polypeptide.
DE
XX
KW
     diagnostic; prognosis; genetic marker; screening; cancer; cytostatic;
KW
     neoplasm; HUMEGFRBB3_PEA_1_P31; protein-tyrosine kinase erbB-3 precursor;
KW
     ERBB3.
XX
OS
     Homo sapiens.
XX
PN
     WO2006043271-A1.
XX
PD
     27-APR-2006.
XX
PF
     16-OCT-2005; 2005WO-IL001096.
XX
PR
     22-OCT-2004; 2004US-0621004P.
PR
     18-NOV-2004: 2004US-0628529P.
XX
PA
    (COMP-) COMPUGEN LTD.
XX
PΙ
     Novik A, Pollock S, Levine Z, Dahary D, Sorek R, Sella-Tavor O;
PΙ
     Cohen-Dayag A, Sameach-Greenwald S, Walach S;
XX
DR
     WPI; 2006-331789/34.
DR
     N-PSDB; AEH24326.
XX
PТ
     New isolated polynucleotide and polypeptide markers, useful as diagnostic
PΤ
     markers for diagnosing diseases, predicting response to treatment,
     monitoring treatment, or determining prognosis of a marker-detectable
PT
PΤ
     disease.
XX
PS
     Example 5; SEQ ID NO 139; 421pp; English.
XX
CC
     The invention describes an isolated polynucleotide comprising
     HUMA1ACM_PEA 2 _T21, HUMA1ACM_PEA 2 _T27, or HUMA1ACM_PEA 2 _T7
CC
CC
     comprising 1320, 1239, or 2713 bp (SEO ID NO. 1, 2, or 3). Also described
CC
     are: an isolated polypeptide selected from HUMA1ACM_PEA 2 _P36 (SEQ ID
CC
     NO. 51), HUMA1ACM_PEA 2 _P49 (SEQ ID NO. 52), or HUMA1ACM_PEA 2 _P59 (SEQ
     ID NO. 53); an isolated polypeptide encoding for a head of: (a)
CC
CC
     HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous to SEQ ID NO.
CC
     180 or 182 of HUMALACM PEA 2 P36; (b) HUMALACM PEA 2 P49 comprising a
CC
     polypeptide 70% homologous to SEQ ID NO. 182 of HUMA1ACM PEA 2 P49; or
CC
     (c) HUMA1ACM PEA 2 P59 comprising a polypeptide 70% homologous to SEQ ID
CC
     NO. 182 of HUMAIACM_PEA 2 _P59; an isolated polypeptide encoding for a
     tail of: (a) HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous
CC
CC
     to SEQ ID NO. 181 in HUMA1ACM_PEA 2 _P36; (b) HUMA1ACM PEA 2 P49
     comprising a polypeptide 70% homologous to SEO ID NO. 183 in HUMALACM PEA
CC
     2 P49; or (c) HUMAIACM PEA 2 P59 comprising a polypeptide 70%
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homologous to SEQ ID NO. 185 or 208 in HUMA1ACM_PEA 2 _P59; a primer pair comprising a pair of isolated oligonucleotides capable of amplifying the CC amplicon; an antibody capable of specifically binding to an epitope of CC the amino acid sequence; a kit for detecting a marker-detectable disease CC comprising a kit detecting specific expression of a splice variant; a biomarker capable of detecting marker-detectable disease comprising the CC nucleic acid sequences or amino acid sequence, or its fragments. The CC CC polynucleotides and polypeptides are useful as diagnostic markers for CC diagnosing and screening for diseases diseases e.g., cancer, selecting a CC therapy for a marker-detectable disease and determining prognosis of a CC marker-detectable disease, as well as for predicting response to CC treatment and monitoring treatment. This sequence represents a HUMEGFRBB3_PEA_1_P31 polypeptide, a transcript from the HUMEGFRBB3 CC CC cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as CC a diagnostic marker. XX

SQ Sequence 699 AA;

Query Match 100.0%; Score 350; DB 2; Length 699;
Best Local Similarity 100.0%;
Matches 58; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58

Search completed: November 23, 2009, 11:14:49 Job time: 58 secs